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Quality of Care and Outcomes Assessment

WIDE VARIATION EXISTS IN RATES OF ADMISSION TO INTENSIVE CARE UNITS FOR HEART FAILURE PATIENTS ACROSS US HOSPITALS

ACC Moderated Poster Contributions
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Background: Concern about rising cost has focused attention on altering hospital practices to reduce expenses. We examined variation in use of the ICU, a high cost setting, for heart failure (HF) admissions.

Methods: We identified 188,216 HF discharges from 341 hospitals in the 2009-10 Premier Perspective database. We excluded hospitals with < 25 HF admissions, patients <18 years and transfer-ins. We calculated the % admitted directly to an ICU (CCU, MICU, SICU). We then calculated the % of ICU days during which patients received treatment requiring ICU care such as mechanical ventilation, noninvasive positive pressure ventilation (NPPV), vasoactive (VA) drugs and pulmonary artery catheters. We grouped hospitals by quartile of ICU use and compared HF risk-standardized mortality between the top quartile and all others

Results: Among hospitals, the median rate of ICU triage was 15% (IQR 11-22%; range 0.6% to 90%). In hospitals that more often triaged to the ICU, treatments requiring an ICU were less often used: % ICU days intubated (19% top quartile vs. 46% others), NPPV (8% vs. 15%), VA drugs (16% vs. 22%), pulmonary artery catheters (1% vs. 0.4%), and none of these interventions (62% vs. 33%). Overall HF risk standardized mortality was similar in top quartile hospitals vs. others (5% vs 5%; P= 0.4).

Conclusion: ICU admission rates for HF vary markedly across hospitals and had no association with in-hospital risk-standardized mortality. Greater ICU use correlated with fewer patients receiving ICU interventions.